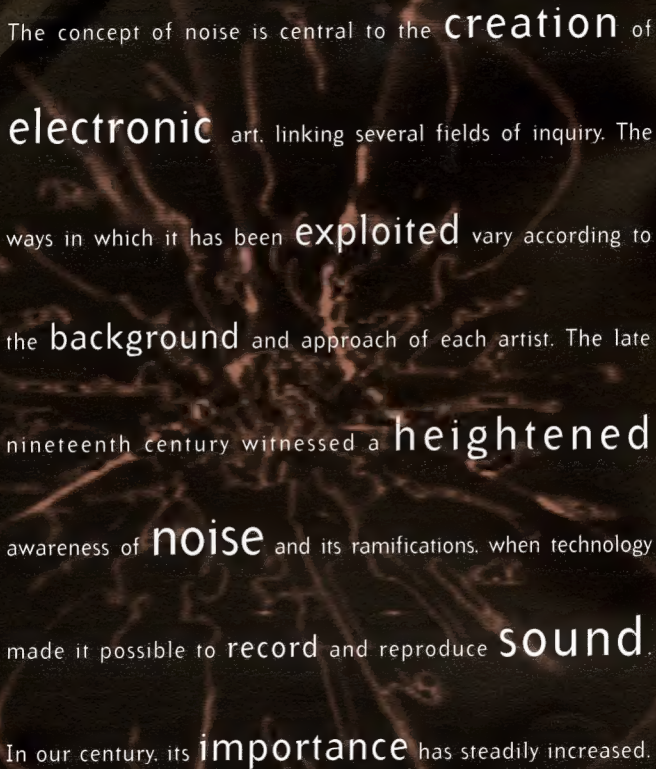




VIDEO/SONORITY VIDEO BORN OF NOISE
NATIONAL GALLERY OF CANADA



The concept of noise is central to the **creation** of **electronic** art, linking several fields of inquiry. The ways in which it has been **exploited** vary according to the **background** and approach of each artist. The late nineteenth century witnessed a **heightened** awareness of **noise** and its ramifications, when technology made it possible to **record** and reproduce **sound**. In our century, its **importance** has steadily increased.

VIDEO / SONORITY

VIDEO BORN OF NOISE

Communications theory assigns two meanings to the word "noise": it is what we do not want to hear or see, but it is also a signal marked by some disorder which, like order, is governed by its own laws. This leads us to draw a distinction between shape and background, the shape of a given signal set against a background of accidental sound, such as the background noise of the universe as examined in modern physics.

The notion of noise is also associated with recording and audio/video reproduction technologies, in which the signal-to-noise ratio is measured in decibels. In all analog recordings of sounds and images on magnetic tape, a background noise, aptly called "white noise" in audio and "snow" in video, can be "coloured" by filtering, thanks to electronic equipment. Nam June Paik has concluded that "white noise has the maximum quantity of information."¹

Many of the videotapes exhibited here show signs of the struggle in which the artist, assisted by electronic instruments, attempts to give form to the formless entity known as noise. But noise is not a simple metaphor: it serves as raw material for artists working on electronic signals. Two tendencies meet head-on here, in a confrontation similar to that between the supporters of concrete music versus electronic music in the 1950s – the one being iconic, the other abstract. The illusionism of the analog image comes face-to-face with the realism of the material conditions imposed by the electronic basis of the image.



CHRIS MULLINGTON, STILL FROM *AMERICANS (HER-KINS)*.

OPPOSITE: STEPHEN BECK, STILL FROM *CONCEPTION*.

In Stephen Beck's tape *Conception* (1972), these two tendencies overlap. The human body, an exceptional representation of the concrete form, instantly dissolves into the fluidity of the video signal. The electron beam and the scanning process are manipulated so as to produce two effects: an emanating, fluid effect and a geometric effect created by forms often resembling a mandala, with all the meanings and mystical Oriental implications associated with that form. Beck's videotapes rank among the most articulate work produced by artist-engineers: and his works selected for the present exhibition give us a good idea of the contribution to early research into image synthesis made by these artists.



Ultimately, the concept of noise revisits the modernist inquiry of the 1960s and 1970s into the medium's characteristics, but from a new perspective. Rather than defining video's autonomy, the artistic practice of noise (visual and aural) – far from being minimalist, modernist, or essentialist – is defined by its problematic relationship

with society, the art milieu, social communication, and the media environment. Music, a channelling of noise and violence according to Jacques Attali, would then be "a sublimation, an exacerbation of the imaginary, at the same time as the creation of social order and political integration."²

For the first time in art history, visual forms were being created by methods closer to those employed in music than in painting, sculpture, or even cinema. From this point on,

technology would have the capacity to generate visual forms, bringing about a relationship between image and image-maker characterized by instrumentation and the directness of instrumental creation. In his article, "The Sound of One Line Scanning," the acclaimed video artist, Bill Viola, states:

The video image is a standing wave pattern of electrical energy, a vibrating system composed of specific frequencies as one would expect to find in any resonating object.³

More importantly, he adds: **All video has its roots in the live. The vibrational acoustic character of video as a virtual image is the essence of its 'liveness.'** Technologically, **video has evolved out of sound....⁴**

The period from 1965, when video technology first appeared, to about 1975 was a time of major social transition associated with the student movement, youth, and the counter-culture. The attendant reexamination of traditional channels of information was accompanied by the desire to replace them with an ideal of media democratization, community-oriented television, and cable networks. Artists shared this optimism regarding the media, not only in purchasing the video tools then on the market (the Sony Portapak) but also in collaborating with engineers. Some – Beck, for example – even developed their own instruments: synthesizers, colourizers, and scan processors. The *Ars Electronica 1992* exhibition in Linz, Austria, focussed on the first instruments of the electronic arts, including their forerunners in the field of sound, most notably the audio synthesizer.⁵

These video instruments still exist in many cases and some are operational at the Experimental Television Center in Owego, New York. Upstate New York was also the location of other important centres, where the earliest research into the synthesized image was

conducted: Synapse at the State University of New York (SUNY) at Syracuse, where Bill Viola produced some of his first tapes (David Ross, curator at the Everson Museum in the 1970s, who mounted one of Nam June Paik's first important exhibitions, studied at this campus): SUNY at Buffalo, whose teaching staff included the experimental filmmakers Hollis Frampton, Paul Sharits, Tony Conrad, and, in 1974, Woody Vasulka, after he and his wife Steina had founded the Electronic Kitchen, better known today as The Kitchen, in New York. All this activity so close to the Canadian border and Montreal, where Le Vidéographe was at its peak in these early days, might explain Jean-Pierre Boyer's presence in this milieu and his acquaintance with Woody Vasulka. Boyer was an instructor and artist-in-residence at the Experimental Television Center and SUNY at Buffalo in 1975-76.



FROM LEFT TO RIGHT, FRONT ROW: WENDY CLARKE, JEAN-PIERRE BOYER;
 SECOND ROW: TAKA IMURA, WOODY VASULKA, NAM JUNE PAIK, GERALD D'GRADY;
 THIRD ROW: BILL VIOLA, ED ENSHMILLER, KIT GALLOWAY, STEINA; BACK: WALTER WRIGHT.
 COURTESY OF STEINA AND WOODY VASULKA, c.1974.

TECHNOLOGIES, NOISE AND MUSIC: THE PLEASURE OF COMPOSITION

In his work on the political economy of music, Jacques Attali identifies four networks or historical situations that explain the transformations in music's relationship to social and political integration. The first is **sacrificial ritual**, the second, **representation** (the concert), the third, **repetition ritual**, and the fourth, **composition**. From this perspective, video art, like audio art, concrete music, and electroacoustic music before it, is channelled through the repetition network and the composition network. It is caught in a difficult dialogue between what technology can provide in terms of cultural forms (images, sounds, and techno scientific knowledge) and what it allows the composer within this culture where such forms overabound. Attali also contends that the relationship of the composer to his creation mirrors, in a sense, the technocrat's relationship to society. Thus the new forms of music appearing in the twentieth century — twelve tone (or serial) music, concrete music, and electroacoustic music — are characterized by the scientism of Boulez and Xenakis, Stockhausen's imperial universality, John Cage's depersonalization, and Philip Glass' deconcentration and manipulation of power.⁶ The Cagian perspective clearly prevails in Paik's works, for instance. This approach is strongly influenced by Oriental philosophies, in particular Zen Buddhism, and is characterized by indeterminacy, elimination of the artist's ego, mechanical objectivity, and a cybernetic conception of nature and society. Attali lists this approach among the new forms of Western music that respond to the demands of the repetition network, to its absence of meaning, to the impossibility of communicating. In this advanced form of twentieth century music, the technocratic language generates "a more efficient channelization of the productions of the imaginary ... forming the elements of a code of cybernetic repetition, a society without signification — a repetitive society."⁷

Since repetition translates into loss of meaning in the music stored by recording, it "is no longer a form of sociality, an opportunity for spectators to meet and communicate," as the concert was, "but rather a tool making the individualized stockpiling of music [as well as sounds, voices, and images] possible on a huge scale."⁸ Subjected to this loss of meaning, art which uses these technologies and instruments that artists have invented outside of the commercial circuits arises out of a cultural and technological knowledge of repetition. But the act of composing is defined by Attali as:

The musician's own enjoyment, as self communication, with no other goal than his own pleasure, as something fundamentally outside all communication, as self



transcendence, a solitary, egotistical, noncommercial act.... Thus composition proposes a radical social model, one in which the body is treated as capable not only of production and consumption, and even of entering into relations with others, but also of autonomous pleasure.⁹

In this exhibition, many of the images are repetitive media quotations, especially in the videotapes of Nam June Paik and Nearn Cathod. The sociality of solitary reception, repetition, and technological reproduction provide a constant frame of reference for the artist. Their exploitation brings the body into play, naturally, but also enters the realm of urban and media violence, the shattering of identity in time and space through the ebb and flow of media waves and signals.

NEARN CATHOD. STILL FROM HE WAS ALIVE NOW HE'S DEAD.

Sound plays a central role in the work of Neam Cathod. His background is in electroacoustics and his tapes are produced in collaboration with Maël and Loulou Anod, using the collective name Département d'entraînement à l'insanité (D.E.I.). In *He Was Alive Now He's Dead* (1983), the television becomes a source of light and sound in the form of chants, a metaphor for the divided body. In *Danikû* (1989), the media noise reaches a level at which listening and viewing inflict pain on the body, both of the viewer and in the picture.¹⁰ The overload and accumulation of audiovisual information and the high-speed editing produced with the "hallucinoscope" developed by Neam Cathod, which "accelerates the pace of the images, so as to develop various interpenetrations of planes, alternations of sounds and images,"¹¹ work together to generate media noise and violence.

In *Blind Light* (1982), we gradually understand that Neam Cathod is launching an attack on television, going so far as to strike the TV set itself with a crowbar. Destroying television sets is nothing new, but the preceding images have conditioned our attention by an aesthetic of lassitude and irritation. From the start, Neam Cathod is sitting across from us and watching us, establishing a mimetic situation (he looks at us in the same way that we look at him). We realize that he is watching television when he gets up at regular intervals and noisily turns the knob of what we recognize by the sound to be an old set. At that point, several layers of sounds and images, coming from as many channels, are superimposed on one another. The



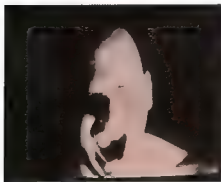
NEAM CATHOD. STILL FROM *DANIKÛ*.

sound keeps getting louder, and at the same time, the accumulated sounds and images fuse together and clash. The audiovisual fluidity of the medium creates interference and random associations generating noise, which brings us back to Attali's ideas on violence, but a mediatized violence due to the accumulation and overload of information.

A number of techniques, at the embryonic stage or present in the earliest of these tapes, are also used in the latest one, *Danlık*. Similar to Paik in many respects, Neam Cathod uses images found in the media, television in particular, and pushes the collage technique to the limit through an excessively rapid juxtaposition of images. These are taken from six sources: a home video with children, an old porno film, Donald Duck, a news broadcast on South Africa, a Catholic priest saying Mass, and a lizard. These "ready-made" images, selected media images, collide and clash. Christine Ross comments that this videotape presents "an aesthetic of *clashing*, of jarring noise, of addition, of aggression, and of image contamination, endlessly displacing the limits of obscenity and excess."¹²

Neam Cathod perversely comes back to the video purity of the electronic image. But unlike the purist research of the 1970s, the electronic purity of image displayed here is a purity pervaded by the body and the mediatized identity split. Christine Ross discusses the *purity of impurity* in reference to the scene showing defecation, a repetitive act of rejection.¹³ Cathod's work manifests a forceful and violent return to the agonizing dynamic operating between the Dionysian enthusiasm of the musical sensibility and the Apollonian sense of moderation affirmed by the creation of plastic forms and iconic images. *Danlık*, more than any other work in this exhibition, articulates these two principles of the Nietzschean aesthetic. This tape shows figures, once independent entities, in the process of dissolving into the shifting and sound-intense fluidity of the video raster.

Dionysus represents the notion of the individual dissolving into the collective through ecstasy and music. Nearn Cathod's tape conveys the suffering related to this dissolution in the era of repetition. Given that the innate pleasure of the composer is based on simulacra of the media, removed from reality (the simulacrum being a copy with no original), and given that this stockpile of available media images is characterized by the vacuity common to representations in this age of simulacra, and also that mediatized sociality can be measured by the degree to which images and sounds are received in a solitary situation – for all these reasons, this innate pleasure, perhaps autonomous, as Atrali contends, is also the suffering of dissolution, and is resolved in violence and death, in the dividing of the body. In the current state of social relationships, violence and the imaginary can be assumed individually through the pleasure of the poetic action, in which composition articulates the Dionysian struggle of body and soul, divided, torn, and suffering.



NEARN CATHOD. STILL FROM *HE WAS ALIVE NOW HE'S DEAD*

PAIK AND FLUXUS

Films produced by Jud Yalkut in the 1960s provide a record of Nam June Paik's first electronic explorations in the US. They trace the development of a language based on the audiovisual "ready-made," on quotations of his own work, on motifs borrowed from media pop culture, on repetition and collage, on self-reference, on formal manipulations of television signals and videotape, and on the interplay of image and sound. Even if they only offer fragments of Paik's early work with TV and video, these films demonstrate a playful attitude towards television. Yalkut describes the techniques of these films:

(1) The study of electronic images composed by purely electronic means directly onto the cathode ray screen, (2) the articulation of metaphors by cinema, aiming to deepen the ontological meaning of monotony, and (3) the transmutation of popular cliché images — reiterated and metamorphosed beyond their popular meanings into abstraction.¹⁴

In 1973, Paik produced *Fluxus Love* at the WNET experimental television laboratory in New York. Appropriating and manipulating electronic and kinegraphic material, he integrates these studies into a more complete concept, in which the electronic collage of images becomes the organizing principle of the videotape. David Yess distinguishes three types of elements in this work.¹⁵ The first, in real time, representing a "ready-made video," shows excerpts of Paik's performance with Celine Clorotte-Moorman wearing a "TV Bra" and playing a TV piano, and John Cage reciting an anecdote that Paik often repeated in subsequent films, such as *A Tribute to John Cage* (1976).

These segments show Paik constantly recycling his own work (an ironic repetition of himself), as well as recycling Cage and McLuhan, the legendary media figures we find in his work. The second type of segment evokes dreamlike states, in which time is compressed or expanded by editing at different speeds. The third conveys states of rapture by means of kinaesthetic images colourized by the synthesizer. An explosion of ecstasy, defined by a prevalence of dance and music that has been subjected to an explosive style of editing, indicates that the musician Dionysus has once again encroached on the territory of Apollo, master of classic beauty and representation.

Paik is a central figure in the relationship we wish to establish between musical concepts, electroacoustics, and the development of video art. He is central for several reasons: he worked with Karlheinz Stockhausen in the late 1950s at Radio Cologne's Studio for Electronic Music, and in the 1960s he was associated with Fluxus, the "most musical" of the avant-garde in that field,¹⁶ which took issue with the traditional hierarchies of the music world and artistic practices in general. We should also note the influence of John Cage, whose ideas on indeterminacy in composition and the role of chance were essential to the development of Paik's aesthetic. Marshall McLuhan imparted his technological optimism and Norbert Wiener his conception of an intermedia and cybernetic art revealing a Zen influence¹⁷



NAM JUNE PAIK. STILL FROM *GLOBAL GROOVE*.
CHARLOTTE MOORMAN PLAYING THE "TV CELLO."

In one sentence, Paik sums up the problematic of the videotapes in this exhibition:

Maybe one needs ten years to be able to perceive the delicate differences between thirteen different 'distortions' (?), as was needed to perceive the delicate differences between many kinds of 'noises' (?) in electronic music.¹⁸

Fluxus was prematurely slotted into the neo-Dada or anti-art tradition, but its original aspects are now being rediscovered, most notably the prominent role of music as an avant-garde practice. In this regard, Fluxus foreshadowed, in some respects, the subsequent and related trends of Minimalism and Pop Art. The former is concerned with art's materiality and its reception by the art institution, while the latter integrates daily life and its objects into the process of creating and receiving art. As John G. Hanhardt has observed, Paik was content with appropriating a familiar object, the television set, which he exhibited "prepared" at the Galerie Parnass in Cologne in 1963, somewhat in the same manner that Cage "prepared" his pianos.¹⁹

George Maciunas, impresario, historian, and Fluxus promoter, presents the following genealogy by way of definition:

We have the idea of indeterminacy and simultaneity and concretism and noise coming from Futurism, theatre, like Futurist music of Russolo. Then we have the idea of the ready-made and concept art coming from Marcel Duchamp. Okay, we have the idea of collage and concretism coming from Dadaists.... They all end up with John Cage, with his prepared piano, which is really a collage of sounds.²⁰

The association of Istvan Kantor (Monty Cantson) with Fluxus and Dada and the militant tone (indeed military at times) of the manifesto come from his ironic appropriation of certain trappings of the historical avant-gardes, which he terms "Neoism."

Jericho, *Sonic Manifesto. The Anti Cycles of Megaphony* (1991), a take-off on manifestos, claims to be "based upon the unproved evidence of the lost documents of the book of Joe Shoe."²¹ The simulated writings of Joe Shoe are declaimed over the megaphone or appear on the screen, the words spit out, denouncing the incarceration of the mediatized society to music with martial overtones:

"Refuse, deny, negate." – Joe Shoe, in *No is all*.

"We are at war: the fight is between expression and suppression" – Joe Shoe, in *Killers of Paradise*.

We find Cantsin in striped prison garb, thrashing about in jail, beaten by the high speed editing. But is the prison the cramped screen of the monitor a metaphor for mediatized alienation? This highly ironic work is based on noise overload, the absence of moderation, the near-dementia of the "megaphony," the hissing discourse that contrasts with the carefully constructed image and meticulous computer graphics, unleashed noise against visual sobriety, the picture overrun by sound, the irony in the contrast between the sound oozing from the megaphone and the sharp image



Jericho leaves little hope for the state of our mediatized societies or for the sociality unhinged by the solitude incorporated into media reception. Here, the art of noise becomes the aesthetic of the scream, with excessive noise in the discourse and the discourse dissolving into the noise, for discourse is no longer an effective form of criticism in a culture imprisoned by simulacra, a mediatized society of the spectacle.

IMAGE SYNTHESIS: SOME PIONEERS

The work of Jean-Pierre Boyer, a Montrealer who conducted intensive research on the synthesized video image from 1972 to 1980, is a prime example of that aspect of sound discussed by Viola. Boyer's work stems from the same artistic intuition that has nurtured the creativity of a great many pioneers. Both in the sounds and the visual forms generated by music or sound, *Le chant magnétique* (1970-74) and *Phonoptics* (1973-74) define an aesthetic of the electronic non-figurative image and a practice based on the creation of audiovisual forms through the use of instruments.

Boyer manipulated the color and the video and audio signals in a manner similar to Paik's, especially when using the electromagnetic and manipulating the TV set's inner circuits. He developed an instrument that he humorously christened his "boyétiseur." Plugging the sound into the circuit controlling the scan, Boyer modified the images and created forms by using oscillators. A floating image of his face is the signature for many of his videotapes, short "songs" illustrating the notion of the "time/energy object." This term was coined by Woody Vasulka to describe the audiovisual synthesis thus created, in which light is energy that is "sculpted" or modified during the time interval when it is formed by scanning on the screen, in a "musical" process.²²

Ernest Bosella, another master musician, created visual forms out of synthesized sound in *Abstract Images* (1970-74). He used an oscilloscope or scan processor, which Boyer employed. At the time, artists were searching for a language suitable for the electronic medium. In the time of electronics, images and sounds are produced by

abstracting a manipulatable electronic signal, in a process involving the construction and transformation of waveforms and manipulation of the raster. In the 1960s, the advent of videos and video instruments made it possible to "play" images in the same manner that one might play musical instruments to produce sounds, thus defining an instrumental relationship to the image, here electroacoustics found its perfect visual counterpart, corresponding to a sort of "phonoptical" process. In the creation of electronic images as well as electroacoustic music, the recording of an event on magnetic tape was handled and then processed by an analog (as opposed to a digital) signal. Having become fluid, images and sounds were expressed in such terms as "phase," "waveform," "scanning," and "raster."

In *Violin Power* (1970–78), Steina (Vasulka), an accomplished violinist, displays her virtuosity as she explores the electronic instruments used, the synthesizer and various signal manipulators. Several years in advance of the MIDI instruments,²³ Steina transforms her violin into an instrument generating patterns, shapes, and various distortions via electronic interfaces. This work, a self-portrait of the artist, spans a number of years: her face changes and ages. Identity and tone become intermittent and fragile, rather like the wavelike image of the bow on the violin. She is "playing" these images with all the playfulness that such a



JEAN PIERRE BOYER, STILLS FROM *LE CHANT MAGNÉTIQUE* AND *PHONOPTIC*
COURTESY OF THE ARTIST

formula implies. At the end, the strident electric violin is accompanied by images distorted by scanning deflection and reduced to shifting linear patterns in the intense light into which the sound energy has been transformed.

Violin Power documents the process of interaction between the artist and the "immaterial" material that comprises the audio and video signals. They generate and trigger each other by means of electronic instruments. Steina's husband and collaborator, Woody Vasulka, shares his thoughts on this relationship:

I was always interested in self-generation, whether that was a conscious thing or not.... With electronic systems, again, there was the same desire to deal with systems that generate according to their own inner architecture.²⁴

The artist's ego is obliterated when confronted with mechanical objectivity, in an indeterminacy closely related to Cage's concepts.



Trained as a filmmaker in Prague,

Woody Vasulka was fascinated from the beginning by the electronic image with all its energy, fluidity, and malleability: it is a frameless image (as opposed to that of film) that undergoes endless transformation during the scanning process on the cathode screen. Working with the time interval that occurs in scanning, Woody and Steina Vasulka experimented with freeing the image from the tyranny of the *camera obscura* and perspective.

STEINA. STILL FROM *VIOLIN POWER*.

When Woody Vasulka first arrived in the United States, he was amazed to discover the existence of an alternative industrial subculture which, like art, is based on individuals.²⁵ Curiously, on the question of art's relationship to electronic instruments, Jacques Attali returns to the values associated with classical composition, and sees this relationship as the composer's alienation toward what he creates: the composer no longer controls the process but is subjected to the creation of unanticipated forms.²⁶ However, even if this hypothesis often holds true, we still should not denigrate the explorations made with these instruments endowed with new capacities. In fact, Woody Vasulka finds that the creative process grows out of the artist's dialogue with his instruments.



Voice Windows (1986) visually represents Joan La Barbara's singing exercises by means of waveforms that open windows through which landscapes are superimposed on one another. The voice upsets our contemplation of the landscape and creates disorder in the process. Although this voice is a hindrance to a single, coherent vision, it generates further images.

René Payant describes the video image as "gaunt" and generating ambivalence, shifting, uncertainty, and instability of identification.²⁷ In this respect, Steina appears to be post modern from the start. But this is not what concerns us here. An examination of these works, known as "image processed videos" in the U.S., reveals an aesthetic of the electronic image, gaunt indeed, yet energetic and composed with innate musical pleasure, without the need for figuration or the full image

STEINA. STILL FROM *VOICE WINDOWS*.

NOTES

1. Nam June Paik: *Video n Videology 1959-1973*. Syracuse, NY: Everson Museum of Art, 1974. n. pag.
2. Jacques Attali: *Noise: The Political Economy of Music*. Minneapolis: University of Minnesota, 1985. p. 26 (translation of *Bruits: essai sur l'économie politique de la musique*. PUF: coll. Biblio essais, Paris, 1977).
3. In *Sound by Artists*, eds. Dan Lander and Michal Lexner. Banff, Alberta: Walter Phillips Gallery and Art Metropole, 1990. p. 43.
4. *Ibid.*, p. 44.
5. See *Eigenwelt der Apparate-welt: Pioneers of Electronic Art*. Linz, Austria: David Dunn, 1992, curated by Woody and Sienna Vasulka. For a history of video art based on electronic manipulation, see Lucinda Furlong's articles in *Afterimage* 11.1: 2 and 5. A detailed list of these hand-made instruments developed and used from 1968 to 1975 may be found in the *Ars Electronica 1992* catalogue. For France, see Dominique Belloir, "Video Art Exploration," *Cahiers du Cinéma*, 1981.
6. Attali, pp. 113-15.
7. Attali, p. 83.
8. Attali, p. 32.
9. Attali, p. 32.
10. For a study of the theme of suffering in this videotape, see Christine Ross, "Le corps, la vidéo: Notes sur la souffrance," *Parachute* 64, pp. 37-40.
11. C. Ross, p. 39 [our translation].
12. C. Ross, p. 38 [our translation].
13. C. Ross, p. 38.
14. Cited in *Video Art: An Anthology*, eds. Ira Schneider and Beryl Korot. New York and London: Harcourt Brace Jovanovich, 1976. p. 147. The "Statement of Objectives" was originally published in *Film Culture*, no. 43.
15. See D. Ross, "Nam June Paik Videotapes," in *Transmission*. New York: Peter D'Agostino, Tanam Press, 1985. pp. 151-63.
16. See Douglas Kahn, *The Latest: Fluxus and Music. In the Spirit of Fluxus*. Minneapolis: Walker Art Center, 1993.
17. See *Video n Videology*, 1974.
18. Nam June Paik, cited in *Video n Videology*, 1974.
19. "Dé-collage/collage: Notes Toward a Reexamination of the Origin of Video Art," *Illuminating Video*, pp. 71-79.
20. Kahn, p. 104.
21. Opening credits of *Jericho*.
22. See *Afterimage* (Summer 1978), pp. 20-23.
23. Musical Instrument Digital Interface.
24. *Afterimage* (Summer 1978), p. 23.
25. See Charles Hagen, "A Syntax of Binary Images. An Interview with Woody Vasulka," *Afterimage* (Summer 1978), p. 20.
26. See Attali, p. 115.
27. Payant uses the term *farfelique* which we have translated as "gaunt." René Payant, "La frénésie de l'image, vers une esthétique selon la vidéo," *Vedute, pièces détachées sur l'art 1976-1987*. Laval: Éditions Trois, 1987. First published in *Vidéo-vidéo, Revue d'esthétique nouvelle série*, no. 10, Privat, 1986.

BIOGRAPHIES

STEPHEN BECK

Born in 1950 in the U.S., Stephen Beck currently lives in Berkeley, California. He studied music and electronic engineering at the University of Illinois at Urbana and at the University of California at Berkeley. In 1969, he created the Beck Direct Video Synthesizer, one of the first video synthesizers, and in 1974, he invented a digital instrument called the Beck Video Weaver.

Born in 1950 in Beauharnois, Québec, Jean-Pierre Boyer is an artist, professor, and researcher. He received his master's degree in art history from the Université du Québec à Montréal (UQAM) in 1980, and four years later, a doctorate in communications from the École des hautes études en sciences sociales in Paris. Boyer teaches in the communications department at UQAM. He produced his experimental videotapes between 1971 and 1979.

JEAN-PIERRE BOYER

NEAM CATHOD

Born in 1954 in Montreal, Neam Cathod received a master's degree in acoustic music and composition from the Université de Montréal in 1986. He is co-founder, with Maël and Loulou Anod, of D.E.I., Département d'entraînement à l'insanité (department of insanity training), a multimedia creation group. He is a professor of video and multimedia art in the communications department at UQAM.

An artist and professor, Ernest Gusella was born in 1941 in Calgary. He currently lives in New York. He studied

ERNEST GUSELLA

biochemistry at the University of Idaho from 1957 to 1960, and he received a bachelor's and master's degree in fine arts from the San Francisco Art Institute, which he attended from 1966 to 1968. Gusella developed an interest in video in 1970, inspired by the works of Nam June Paik and the Vasulkas.

ISTVAN (MONTY CANSTIN) KANTOR

Born in 1949 in Budapest, Istvan Kantor immigrated to Canada in 1977 and now lives in Toronto. A performance artist, singer, filmmaker, and video artist, he studied medicine and fine arts at the University of Budapest, the Université de Paris, and the Université de Montréal. He produced his first videotapes in the late 1970s, the period when he founded the Neoist movement. He is best known for his many performances, whose provocative spirit evokes that of the Dadaists.

Born in 1957 in Ottawa, where he presently lives, Chris Mullington's primary interest is in

MULLINGTON^{CHRIS}

producing video images generated by pop culture. In the past several years, he has collaborated with composer Ed Eagan. Many of his videotapes have been broadcast on CBC Television, which also aired a series of reports he produced for *Life – The Program*.

NAM JUNE PAIK

Born in 1932 in Seoul, Nam June Paik lives in New York City. From 1953 to 1956, he studied aesthetics, music, and art history at the University of Tokyo. In the late 1950s, he continued his studies in Germany, in Munich and Cologne, and then at the Freiburg Conservatory of Music. It was during his stay in Germany that he met John Cage, at the time of his involvement with Fluxus. Paik immigrated to the U.S. in 1964. A major video figure, he is known for his performances with Charlotte Moorman (*TV Cello*) and for his video sculptures.

A multidisciplinary artist, Racine was born in 1956 in Montreal, where he is currently living. He has created

RACINE^{ROBER}

many performances and installations dealing with music and literature: *Les Vexations* d'Erk Satie (1978); *Gustave Flaubert* (1980); and *Le Parc de la langue française*

(1979-84). Today he devotes his time to writing; in 1992, he published a novel entitled *Le mal de Vienne*.

RICK RAXLEN

Born in 1945 in Toronto, video artist and filmmaker Rick Raxlen lives and works in Vancouver. In 1968, he studied communications at Columbia College in Chicago, and in 1984, received his master's degree in fine arts from Bard College, Annandale-on-Hudson, New York. From 1967 to 1976, Raxlen produced various short works for the National Film Board. His first full-length film, *Horses in Winter*, was made in 1988.

Born in 1940 in Reykjavik, Steina now lives in Santa Fe, New Mexico, with her husband and collaborator, Woody Vasulka.

STEINA (VASULKA)

who was born in 1937 in Brno, Czechoslovakia. After studying at the Reykjavik School of Music and the Prague Conservatory of Music, she became a violinist with the Icelandic Symphony Orchestra in 1964. The next year, she immigrated to the U.S. with her husband. Both have been acclaimed as pioneers in the field of experimental video since the early 1970s, exploring the interrelationship of the electronic sound and image.

JUD YALKUT

Born in 1938 in New York, filmmaker Jud Yalkut produced video-films with Nam June Paik from 1965 to 1972. He was one of the first to attempt combining film with the electronic medium.

THIS PUBLICATION ACCOMPANIES THE EXHIBITION *VIDEO/SONORITY: VIDEO BORN OF NOISE*, ORGANIZED BY THE NATIONAL GALLERY OF CANADA, SHOWN IN OTTAWA FROM 6 OCTOBER 1994 TO 2 JANUARY 1995, AND CIRCULATED IN CANADA THROUGH ITS TRAVELLING EXHIBITIONS PROGRAMME.

© NATIONAL GALLERY OF CANADA, OTTAWA, 1994

ISBN 0-88884-643-6

VIDEOTAPES IN THE EXHIBITION

Stephen Beck *Conception* (1972). 5:20 min., colour, electronic music by Stephen Beck.

Jean-Pierre Boyer *L'amertube* (1972). 11:40 min., b/w, electronic music by Pierre Henry, Pierre, and Jean Claude Risset. *L'eau d'oubli* and *Flux* (1972-73). 17:45 min., b/w, electronic music by Maxfield and Pierre Henry. *Le chant magnétique* (1973). 10:11 min., b/w, image and sound by Jean-Pierre Boyer. *Phonoptic* and *Vidéo-Cortex* (1973-74). 16:44 min., b/w, image and sound by Jean-Pierre Boyer. *Analog* and *Alpha* (1974-75). 10:23 min., b/w, image and sound by Jean-Pierre Boyer. *Vidéogrammes inédits* (1975) 10:45 min., b/w, image and sound by Jean-Pierre Boyer. *Épilogue* (1975). 38 sec., b/w, image and sound by Jean-Pierre Boyer.

Neam Cathod (Département d'entraînement à l'insanité) *Blind Light* (1982). 26:40 min., b/w, stereo, music and sound by Neam Cathod. *He Was Alive Now He's Dead* (1983). 6 min., colour, stereo, music and sound by Neam Cathod. *Danikū* (1989). 10:10 min., colour, stereo, music and sound by Neam Cathod.

Ernest Gusella *Abstract Images* (1970-74). 51:26 min., b/w and colour, image and sound by Ernest Gusella.

Istvan Kantor (Monty Cantsini) *Jericho*, *Sonic Manifesto*, *The Anti-Cycles of Megaphony* (1991). 17 min., colour, stereo, music and performance by Istvan Kantor.

Chris Mullington *Americans (mer-kins)* (1988). 21:45 min., colour, stereo, music by Ed Eagan. *Sandspit* to *Dildo Hippiity Hoppity Home Sweet Home* (1989). 27:35 min., colour, stereo, music by Ed Eagan.

Nam June Paik *Global Groove* (1973). 28:30 min., colour.

Nam June Paik/Jud Yalkut *Beatles Électroniques* (1966-69). 3 min., b/w and colour, music by Kenneth Werner. *Videotape Study No. 3* (1967-69). 4 min., b/w and colour, music by David Behrman and Kenneth Werner. *Electronic Fables* (1971). 8:45 min., colour. *Waiting For Commercials* (1972). 6:45 min., colour.

Rober Racine *J'aurais dit Glenn Gould* (1984). 27:30 min., colour, stereo.

Rick Raxlen *The Polytechnic World* (1984). 10 min., colour. *The Divine Right* (1985). 12 min., colour, music by Yoland Houle.

Steina (Vasulka) *Violin Power* (1970-78). 10:04 min., b/w, *Voice Windows* (1986). 8:10 min., colour, stereo, with the voice of Joan La Barbara.



National Gallery
of Canada

Musée des beaux-arts
du Canada

Canada